

IN THE CLAIMS:

1 1. (Currently Amended) A method of providing access to a server in an
2 arrangement that includes at least one device that serves as a firewall having a protected
3 side and an unprotected side, a first proxy adapted to allow clients on the unprotected side
4 of the firewall to gain direct access thereto, and a second proxy adapted to allow said
5 server, on the protected side of the firewall, to gain direct access thereto and to not allow
6 said clients direct access thereto inside a firewall having an IP address comprising the
7 steps of:

8 receiving at a the first proxy ~~outside the firewall~~ a connection request from a
9 client of said clients ~~that is also outside the firewall, said first proxy having an IP address~~
10 ~~that is different from the IP address of the firewall;~~

11 sending said connection request to the second proxy through said firewall, over a
12 control channel previously established by a second proxy and controlled by the second
13 proxy inside said firewall;

14 ~~said second proxy~~ authenticating the client;
15 when the client is authenticated, said second proxy establishing a data connection
16 with said first proxy, through said firewall, with the data connection adapted to through
17 ~~which said first proxy can~~ forward requests of said client to said second proxy, where the
18 data connection is distinct from the control channel.

1 2. (Currently Amended) The method of claim 1 further comprising the step of
2 receiving a requested resource at the second proxy from the server ~~inside the firewall~~ and
3 using the established data connection between the second proxy and the first proxy ~~client~~
4 to forward the requested resource to the client.

1 3. (Original) The method of claim 2 wherein the resource is a document
2 containing hyperlinks to other resources.

1 4. (Original) The method of claim 3 wherein the second proxy translates the
2 hyperlinks in the document into references directed to and interpreted by the second
3 proxy.

1 5. (Original) The method of claim 3 wherein the document is a Web page.

1 6. (Previously Presented) The method of claim 1 wherein the data connection
2 uses a secure communication protocol.

1 7. (Currently Amended) The method of claim ~~5~~ 6 wherein the secure
2 communication protocol is SSL.

1 8. (Original) The method of claim 1 wherein the client is a browser and the
2 server is a Web server.

1 9. (Original) The method of claim 1 wherein the client is authenticated using a
2 password mechanism.

1 10. (Original) The method of claim 9 wherein the client is authenticated using a
2 one-time password mechanism.

1 11. (Currently Amended) A method of ~~providing a client access to a resource~~
2 ~~stored behind a firewall~~ comprising the steps of:
3 parsing information of a ~~the~~ resource ~~for~~ to identify therein hyperlinks that point
4 ~~to other~~ resources behind a ~~the~~ firewall;
5 rewriting said hyperlinks to point to a proxy enabled to access said resources
6 behind the firewall; and
7 transmitting said information of the resource with the rewritten hyperlinks to the
8 client.

1 12. (Original) The method of claim 11 wherein the resource is a Web page.

1 13. (Original) The method of claim 11 wherein the rewritten hyperlinks also
2 comprise security information.

1 14. (Previously Presented) The method of claim 1 further comprising the step of
2 receiving at said second proxy, in response to a request for a resource from said second
3 proxy, said requested resource from the server inside the firewall and using the

4 established connection between the second proxy and the client to forward the requested
5 resource to the client.

1 15. (Previously Presented) The method of claim 1 further comprising the step of
2 receiving from said first proxy, at said second proxy, a request for a resource of the
3 server.

1 16. (Previously Presented) The method of claim 1 wherein said connection
2 request comprises a URL, the method further comprising said second proxy executing the
3 steps of
4 translating said URL to a URL that corresponds to a URL of a server inside said
5 firewall; and
6 establishing a connection with said URL.

1 17. (Previously Presented) The method of claim 1 wherein the client is
2 authenticated via said control channel using a password mechanism.

1 18. (Previously Presented) The method of claim 1 wherein said control channel
2 is maintained by sending a command that requests a response, over said control channel,
3 at intervals that insure a silence period of not more than a preselected value.

1 19. (Previously Presented) The method of claim 1 wherein said control channel
2 is adapted to carry a limited number of different messages.

1 20. (Previously Presented) The method of claim 1 wherein said control channel
2 is adapted to carry messages from a set that consists of
3 a message sent by said second proxy to establish said control channel,
4 a message sent by said first proxy to request establishment of said data
5 connection,
6 a hailing message that expects a reply, and
7 a reply message that acknowledges said hailing message.

1 21. (Previously Presented) The method of claim 1 said step of establishing said
2 data connection is followed by a step of said second proxy sending a message to said first

3 proxy, over said data connection, to inform said first proxy of the establishment of said
4 data connection.

5 22. (Previously Presented) The method of claim 1 wherein said control channel
6 is maintained by periodically one of the proxies sending a command that requests a
7 response from the other of said proxies.

8 23. (Currently Amended) A method of a user at a host on an outside side of a
9 firewall ~~fire-wall~~ obtaining web pages from a server on an inside side of said firewall
10 comprising the steps of:

11 Receiving, at a first proxy on the outside side of the firewall that is adapted to
12 serve as an interface ~~between servers on said inside side of said firewall~~ fire-wall ~~and to~~
13 hosts on said outside side of said firewall, a connection request from a said user,
14 employing a secure communication protocol;

15 sending said connection request through said firewall, over a control channel
16 previously established by a second proxy on said inside side of said firewall;

17 ~~said second proxy~~ authenticating the user;

18 said second proxy establishing a data connection with said first proxy that is
19 distinct from the control channel, through said firewall, through which said first proxy
20 can forward requests of said user ~~client~~ to said second proxy; and

21 said user obtaining web pages from said server by directing requests to IP address
22 of said first proxy.